AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Canceled)

2. (Canceled)

3. (Currently Amended) A capacitance type sensor ~~characterized in that the sensor~~ comprising[[es]]:

a substrate that provides an XY plane of an XYZ three-dimensional coordinate system ~~defined~~;

a detective member being opposed to the substrate;

a conductive member disposed between the substrate and the detective member so as to be Z-axially displaceable in accordance with Z-axial displacement of the detective member;

a capacitance element electrode formed on the substrate to cooperate with the conductive member to form a first capacitance element; and

a reference electrode formed on the substrate to cooperate with the conductive member to form a second capacitance element, and kept at a ground potential or another fixed potential,[[;]]

wherein the first and second capacitance elements are connected in series in relation to a signal input to the capacitance element electrode, and displacement of the detective member can be detected on the basis of detection of a change in the capacitance value of the first capacitance element caused by a change in the interval between the conductive member and the capacitance element electrode; and

wherein the capacitance type sensor comprises two capacitance element electrodes in a pair, and after each of analog ~~output~~ signals corresponding to signals respectively input to a circuit including one of the capacitance element electrodes and a circuit including the other of the capacitance element electrodes~~, respectively, are detected by a~~ has passed the respective signal processing circuit having hysteretic characteristics and the analog signals are input to a logic element, an output signal is output from the logic element.

4. (Currently Amended) The capacitance type sensor according to claim 3, ~~characterized in that~~ wherein the capacitance element electrode includes a pair of first capacitance element electrodes disposed symmetrically with respect to a Y axis, a pair of second capacitance element electrodes disposed symmetrically with respect to an X axis, and a third capacitance element electrode disposed near an origin.

5. (Currently Amended) The capacitance type sensor according to claim 3~~ or 4~~, ~~characterized in that~~ wherein a threshold value of the signal processing circuit for an increasing input signal ~~increasing~~ is higher than a threshold value of the signal processing circuit for [[the]] a decreasing input signal ~~decreasing~~.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Currently Amended) The capacitance type sensor according to claim 3, ~~any of claims 3 to 5, characterized in that~~ wherein a Schmitt trigger type buffer element is utilized in the signal processing circuit.

12. (Currently Amended) The capacitance type sensor according to claim 3, ~~any of claims 3 to 5, characterized in that~~ wherein a Schmitt trigger type inverter element is utilized in the signal processing circuit.

13. (Currently Amended) The capacitance type sensor according to claim 3, ~~any of claims 3 to 5, characterized in that~~ wherein a hysteresis comparator is utilized in the signal processing circuit.

14. (Currently Amended) The capacitance type sensor according to claim 3, ~~any of claims 3 to 13, characterized in that~~ wherein ~~signals different from each other in phase are supplied to the~~ a circuit including one of the capacitance element electrodes and ~~the~~ a circuit including the other of the capacitance element electrodes are provided with a signal at a different phase of each other.

15. (Currently Amended) The capacitance type sensor according to claim 3, ~~any of claims 3 to 14, characterized in that~~ wherein the time constant between a CR circuit including one of the capacitance element electrodes and ~~another~~ a CR circuit including the other of the capacitance element electrodes ~~are~~ is different ~~from each other in time constant~~.

16. (Currently Amended) The capacitance type sensor according to claim 3, ~~any of claims 3 to 15, characterized in that~~ wherein the signal ~~is a signal in which a high level and a low level are~~ periodically ~~repeated,~~ repeats high-level and low-level, and a control ~~and the sensor further comprises a control~~ element having a function of discharging the first capacitance element when the signal is at the ~~low level~~ low-level is provided.

17. (Currently Amended) The capacitance type sensor according to claim 16, ~~characterized in that~~ wherein an open collector type inverter element is used as the control element.

18. (New) A capacitance type sensor comprising:

a substrate that provides an XY plane of an XYZ three-dimensional coordinate system;

a detective member being opposed to the substrate;

a conductive member disposed between the substrate and the detective member so as to be Z-axially displaceable in accordance with Z-axial displacement of the detective member;

a capacitance element electrode formed on the substrate to cooperate with the conductive member to form a first capacitance element; and

a reference electrode formed on the substrate to cooperate with the conductive member to form a second capacitance element, and kept at a ground potential or another fixed potential;

wherein the first and second capacitance elements are connected in series in relation to a signal input to the capacitance element electrode, and displacement of the detective member can be detected on the basis of detection of a change in the capacitance value of the first capacitance element caused by a change in the interval between the conductive member and the capacitance element electrode; and

wherein the sensor comprises two capacitance element electrodes in a pair, and each of analog signals corresponding to signals respectively input to a circuit including one of the capacitance element electrodes and a circuit including the other of the capacitance element electrodes is input to a Schmitt trigger type logic element having Schmitt trigger input characteristics and an output signal is output from the Schmitt trigger type logic element.

19. (New) The capacitance type sensor according to claim 18,

wherein the capacitance element electrode includes a pair of first capacitance element electrodes disposed symmetrically with respect to a Y axis, a pair of second capacitance

element electrodes disposed symmetrically with respect to an X axis, and a third capacitance element electrode disposed near an origin.

20. (New) The capacitance type sensor according to claim 18,

wherein a threshold value of the signal processing circuit for an increasing input signal is higher than a threshold value of the signal processing circuit for a decreasing input signal.

21. (New) The capacitance type sensor according to claim 18,

wherein the Schmitt trigger type logic element implements the exclusive logical OR operation.

22. (New) The capacitance type sensor according to claim 18,

wherein the Schmitt trigger type logic element implements the logical OR operation.

23. (New) The capacitance type sensor according to claim 18,

wherein the Schmitt trigger type logic element implements the logical AND operation.

24. (New) The capacitance type sensor according to claim 18,

wherein the Schmitt trigger type logic element implements the logical AND operation and the logical NOT operation.

25. (New) The capacitance type sensor according to claim 18,

wherein a circuit including one of the capacitance element electrodes and a circuit including the other of the capacitance element electrodes are provided with a signal at a different phase of each other.

26. (New) The capacitance type sensor according to claim 18,

wherein the time constant between a CR circuit including one of the capacitance element electrodes and a CR circuit including the other of the capacitance element electrodes is different.

27. (New) The capacitance type sensor according to claim 18,

wherein the signal periodically repeats high-level and low-level, and a control element having the function of discharging the first capacitance element when the signal is at a low-level is provided.

28. (New) The capacitance type sensor according to claim 27,

wherein an open collector type inverter element is used as the controlling element.